

**tyco**

Electronics

**M/A-COM****PA1224****2000-2200 MHz.****5 Watt  
Amplifier****28v. GaAs Ultra Linear Power****Features (typical values)****High IP3** ..... +51.0 dBm.**Low NF** ..... 3.0 dB.**High Output Power** ..... +37.5 dBm.**Low Cost**

Parameter	Typical Value	Min. Value	Max. Value	Units
Frequency		2000	2200	MHz.
Gain	25.0	23.0		dB.
Gain Flatness	+/- 0.3			dB.
Pout @ 1dB. comp.	37.5	36.0		dBm.
Noise Figure	3.0		4.0	dB.
ACPR (30kHz. BW)*	-47.0			dBc.
VSWR (Input/Output)	1.5:1/2:1		2:1/3:1	
IP3 (two tone)**	+51.0	+47.0		dBm.
Supply Required***	+28/1000		+28/1200	v./mA.

\* ± 850kHz from fc at power level of 30dBm. (IS-95)

\*\* IP3 measured with 2 tones @ +24dBm. per tone @ 1 MHz apart

\*\*\* a 10 micro farad capacitor is required from pin 3 (+V) to ground  
Min and max values from 0 to 85 degrees C**Outline Drawings**

See Attached Document

**Maximum Ratings**

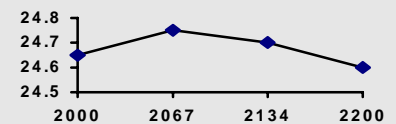
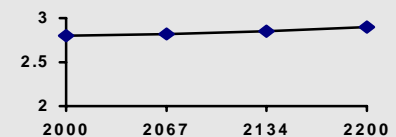
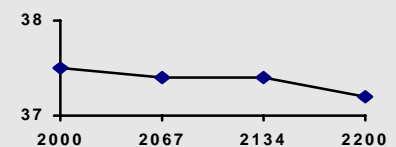
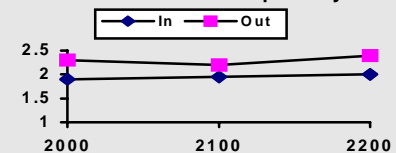
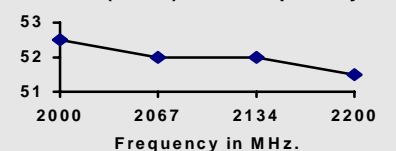
Storage Temperature ..... -40°C to +125°C

DC Voltage ..... +30 volts

RF Input Power ..... +15 dBm.

Case Temperature ..... +90°C

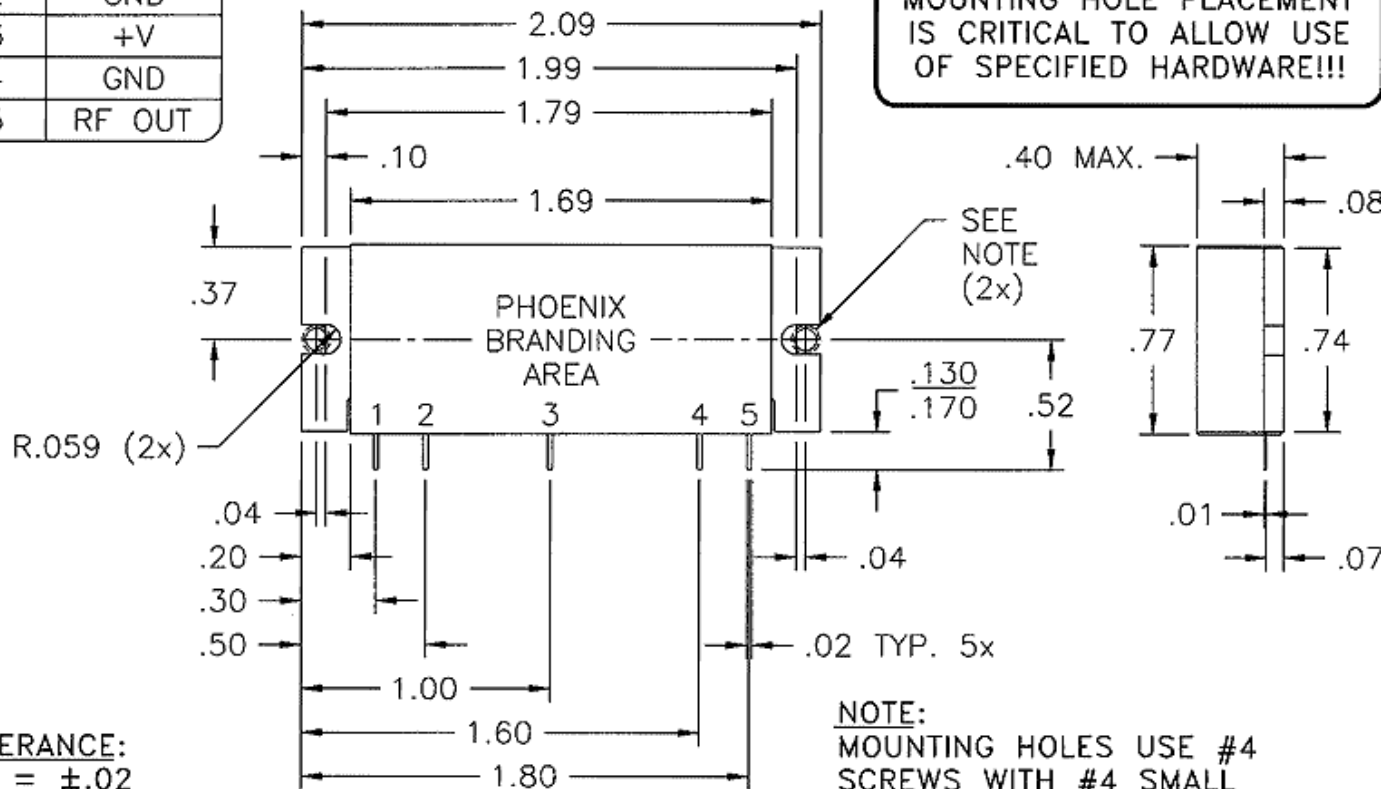
Typical Performance @ +25°C

**Gain (dB) vs. Frequency****NF (dB) vs. Frequency****Pout (dBm) vs. Frequency****VSWR vs. Frequency****IP3 (dBm) vs. Frequency**

# OUTLINE DRAWING

PIN	FUNCTION
1	RF IN
2	GND
3	+V
4	GND
5	RF OUT

**IMPORTANT!**  
MOUNTING HOLE PLACEMENT IS CRITICAL TO ALLOW USE OF SPECIFIED HARDWARE!!!



**TOLERANCE:**  
.XX = ±.02  
.XXX = ±.010

**NOTE:**  
MOUNTING HOLES USE #4  
SCREWS WITH #4 SMALL  
PATTERN FLAT & LOCK WASHERS.